

AMENDMENTS TO THE SPECIFICATION

Please amend paragraphs [0003] and [0004] as follows:

[0003] In operation, a laser beam is emitted from a laser diode 101 and propagated as linearly polarized light through a lens group 102. Thereafter, it is reflected from a polarizing beam splitter 103, and then reflected by a variable-angle mirror 104a **of an optical axis adjusting unit 104** to the device B.

[0004] Similarly, the received light beam LB from device B is reflected by the variable-angle mirror 104a, through the beam splitter 103 to branching element 105. A substantial portion of the light beam LB is transmitted through the branching element 105 to a photodetector 106 by a lens group 107. The other portion of light beam LB is reflected from the branching element 105 to a photodetector 108, which is a position photodetector, via a lens group 109. **A substantial portion (LBa) of the received light beam LB is transmitted through the beam branching element 105, and is converged onto a photodetector 106 by a lens group 107. The photodetector 106 acts as a real signal photodetector. The other portion of light beam LBb reflected from the beam branching element 105 is converged by a lens group 109 as a luminous flux which is received by a photodetector 108.**

Please amend paragraphs [0007] through [0008] as follows:

[0007] For efficient communication, the optical axis of the light beam LA is aligned with the center of the photodetector 108. A spot SP generated on the surface of photodetector 108 by light beam LB, provides a misalignment information signal **that is received and processed by a signal processing unit 110**, which is **then** transmitted to a mirror drive control unit 111 to generate a correction signal. Based on this signal, the

angle of the variable-angle mirror 104a is adjusted to continuously align the optical axes of the light beams LA and LB.

[0008] The photodetector 108 generally employs a quadrant photodetector, which is divided into four elements 121 **by a separation area 122** as shown in Fig. 6. The method for detecting a position using a photodetector has been described in e.g., Japanese Laid-open patent 2001-94513. Such a photodetector 108 is arranged so that the light receiving surface (plate) of the quadrant photodetector is generally located in a position defocused to a converging point of the lens group 109.

Please amend paragraph [0012] as follows:

[0012] In Fig. 7, the distribution of light intensity at the beam entrance **M** of the device (the entrance pupil), is projected as shown. Consequently, the spot SP having an adequate area on the light receiving surface is as shown in Fig. 8.

Please amend paragraphs [0033] through [0034] as follows:

[0033] Fig. 1 is a schematic drawing showing an optical transmission device (device **X** ~~M~~) for providing stable communication with a device **Y N** (not shown) according to a first embodiment of the present invention. A laser beam, which is emitted from a laser diode 1, is propagated as linearly polarized light and is transmitted through a lens group 2 (with positive power). The beam is reflected from a boundary surface of a polarizing beam splitter 3, and is reflected by a variable-angle mirror 4a of an optical-axis adjusting unit 4. It is then projected as transmitting light LA from device **X M** to device **Y N**.

[0034] A received light beam LB is transmitted from the device **Y N** and is reflected by the variable-angle mirror 4a **about an optical axis 12**, and transmitted through the beam splitter 3 to a received light branching element 5. A substantial portion (**LBa**) of the

received light beam LB is transmitted through the beam branching element 5, and is converged onto a photodetector 6 by a lens group 7. The photodetector 6 acts as a real signal photodetector. The other portion of light beam LBb reflected from the beam branching element 5 is converged by a lens group 9 as a luminous flux a dividing element 13 represented by a half-mirror or a prism, which divides the luminous flux. One portion of the luminous flux is received by a first photodetector 8a, which is a position detecting photodetector, and the remaining luminous flux is received by a second photodetector 8b, which is also a position detecting photodetector. Note that the length of the optical paths to the first photodetector 8a and the second photodetector 8b are substantially the same.

Thereafter, signals generated by the photodetectors 8a and 8b are received and processed by a signal processing unit 10, which are then transmitted to a mirror drive control unit 11 to generate a correction signal.